



Mr. Keith Krawczyk
MDEQ-RRD-Superfund
Constitution Hall – 3rd Floor South
P.O. Box 30426
525 West Allegan Street
Lansing, Michigan 48909-7926

ARCADIS of New York, Inc.
6723 Towpath Road
PO Box 66
Syracuse
New York 13214-0066
Tel 315 446 9120
Fax 315 449 0017
www.arcadis-us.com

Subject:

Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site
King Highway Landfill Operable Unit 3
Documentation Required for Item 9 of the Modified AOC Schedule

ENVIRONMENT

Date:

August 23, 2013

Dear Mr. Krawczyk:

Contact:

Patrick McGuire

On behalf of Georgia-Pacific LLC (Georgia-Pacific), ARCADIS is providing the Michigan Department of Environmental Quality (MDEQ) with the following pursuant to Item 9 of the Modified Schedule for Completing Response Activities for the Administrative Order by Consent (AOC-ERD-99-010; AOC) for the King Highway Landfill Operable Unit 3 (KHL OU) and Five Former Mill Lagoons of the Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site located in Kalamazoo, Michigan.

Phone:

315.671.9233

Email:

Pat.McGuire@arcadis-us.com

- Documentation that all required institutional controls are in place.
- Information for ongoing post-closure operations, maintenance, and long-term monitoring, including cost information.

Our ref:

B0064583.0004.00675

Institutional Controls

The institutional controls for the KHL OU are consistent with the Institutional Control Plan (2007 ARCADIS BBL) and consist of the following existing controls.

- Proprietary control of the KHL OU consists of the six parcels that comprise the KHL and the parcel that comprises the five former Georgia-Pacific Mill Lagoons, which are owned by Georgia-Pacific.
- The land use restrictions identified in the Restrictive Covenants for the KHL OU are more restrictive than the allowable uses of the zoning ordinances for the City of Kalamazoo and Kalamazoo Township, in which the western and eastern portions of the KHL OU are located, respectively. Current and future activities at the KHL OU are intended to be consistent with the land use restrictions in the

Restrictive Covenants, which will maintain control over future development of the site. Therefore, the KHL OU is, and will continue to be, in compliance with the allowable uses of the zoning district classifications of the Kalamazoo City Code and Kalamazoo Township Zoning Ordinance.

- Permits have been secured through Michigan Department of Transportation (MDOT) as they related to the use of its right-of-way (R-O-W), including gas monitoring probe installation, fence installation, earthwork and grading, soil sampling and investigation, and the completion of remedial activities within Parcel C. Georgia-Pacific will secure any new permit(s) from the MDOT for any future work that is required in the MDOT R-O-W for continued operation, maintenance, and monitoring of the KHL. Additionally, based on the significant limitations on future use of the KHL OU as described in the Restrictive Covenants, Georgia-Pacific does not anticipate needing any other local permits to maintain the integrity and effectiveness of the completed Response Activities; however, in the event that activities covered by a local permit are necessary, the proper permits will be obtained.
- Access to the KHL and the Five Former Mill Lagoons is restricted by a 6-foot-tall chainlink fence, located between the KHL and King Highway (M-96), between the KHL and the neighboring scrap yard (i.e., Kalamazoo Metal Recyclers, Inc.), and along the northwest and eastern sides of the KHL; and located to the north, east, and south of the lagoons.
- The Restrictive Covenants recorded with the Kalamazoo Country Register of Deeds on June 24, 2013 create restrictions that run with the property; protect the public health, safety, and welfare, and the environment; prohibit or restrict activities that could result in unacceptable exposure to environmental contamination present at the Property; and grant access to the MDEQ, the United States Environmental Protection Agency (USEPA), and either agency's representatives to monitor and conduct Response Activities. Portions of the City of Kalamazoo sanitary sewer line, force main, and pump station are located within the property boundaries of the KHL OU and are served by access roads for maintenance. The City of Kalamazoo has the right to access these utilities in the form of an easement that was recorded with the Restrictive Covenant to perform future subsurface maintenance or install additions or extensions to the utilities.
- Warning signs are posted on the fence that encloses the KHL at maximum 200 foot intervals and at the entry gate to the KHL, which advise that the area is hazardous due to polychlorinated biphenyls in the buried paper-making residuals and provide a Georgia-Pacific telephone number to call for further information.

- In accordance with the proposed specifications provided in the Restrictive Covenant for the KHL, a permanent marker has been installed at the KHL with the document number of the recorded Restrictive Covenant.
- The Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site, which includes the KHL, was included on the National Priorities List pursuant to Section 105 of Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S. Code 9605.

Ongoing Post-Closure Operations, Maintenance, and Long-Term Monitoring

Operations, maintenance, and monitoring (OM&M) activities began in January 2003 following Georgia-Pacific's notification to MDEQ of its preliminary determination of completion of construction (Deliverable/Milestone 9; November 20, 2002) and are ongoing. OM&M activities at the KHL OU, now in the tenth year, generally consist of the activities described in the *FINAL Operation and Maintenance Plan* (O&M Plan; ARCADIS 2013b):

- Groundwater sampling for compliance with MDEQ's generic groundwater-surface water interface (GSI) criterion.
- Landfill gas monitoring for subsurface methane gas concentrations against the lower explosive limit (LEL).
- Performance of routine inspections and required maintenance by Georgia-Pacific's representatives.
- Periodic site visits conducted by representatives of USEPA, MDEQ, and Georgia-Pacific for the purpose of observing and assessing the effectiveness of the Response Activities.

Pertinent inspection, maintenance, and environmental monitoring records are maintained by Georgia-Pacific and have been provided to MDEQ since OM&M activities began in January 2003, as prescribed in the O&M Plan (ARCADIS 2013b).

On May 4, 2012, Georgia-Pacific provided the MDEQ with a present worth total long-term OM&M program implementation cost estimate for the implementation of the O&M Plan for a period of 30 years in accordance with Section 8.5 of the AOC. This cost estimate was the basis for the financial assurance mechanism established under the AOC intended to secure the performance of the Final O&M Plan, oversight, monitoring, and other costs necessary to secure the effectiveness and integrity of the containment measure for a 30-year period. The present worth total long-term OM&M

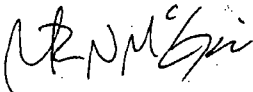
program implementation cost estimate of \$256,963.75 included the present worth long-term cost for the implementation of the landfill gas monitoring program (\$13,690.34), groundwater sampling program (\$110,069.51), landfill inspection program (\$15,511.11), and landfill maintenance program (\$117,692.79). The costs for implementation of these long-term OM&M programs have not changed since the May 4, 2012 submission of the cost estimate. Financial Assurance in the form of a Financial Test is in place and will be maintained for the life of the OM&M period.

Issuance of this letter represents completion of Item 9 of the Modified Schedule for Completion Response Activities for the AOC for the KHL OU.

If you have any questions, please do not hesitate to contact me.

Sincerely,

ARCADIS of New York, Inc.



Patrick McGuire
Principal Environmental Engineer

Copies:

Garry Griffith, P.E., Georgia-Pacific LLC
Daria Devantier, Michigan Department of Environmental Quality
Michael Berkoff, USEPA Region 5
Dawn Penniman, P.E., ARCADIS

References:

ARCADIS BBL. *King Highway Landfill Operable Unit 3 and Five Former Georgia-Pacific Corporation Mill Lagoons Institutional Control Plan*. September 14, 2007.

ARCADIS. 2013a. Proposed Specifications for the Permanent Marker for the KHL. March 14, 2013.

ARCADIS. 2013b. *FINAL Operation and Maintenance Plan*. King Highway Landfill Operable Unit 3. May 6, 2013.

Georgia-Pacific. 2013. Request for 30-Day Extension to Meet the Institutional Control Requirements Outlined in the Modified AOC Schedule. August 1, 2013.